

# MAP MILWAUKEE GIS SERVICES

## CONTENTS

General Information About Map Milwaukee GIS Services .....	3
Root services.....	4
find_address – Scheduled for Removal .....	4
find_taxkey – Scheduled for Removal .....	4
lagan_address .....	4
lagan_corpdb.....	4
overview .....	4
census .....	5
ACS_5YR_2006-2010 .....	5
Census2010 .....	6
DPW .....	7
DPW_operations .....	7
paving_program .....	7
election .....	8
alderman .....	8
geocode .....	9
DIME_geocode .....	9
MAI_geocode .....	9
MAIthenDIME_geocode .....	9
TAXKEY_geocode.....	9
MPD .....	10
MPD_Geography .....	10
OES.....	10
MMSD_geography .....	10
MMSD_GI_plan_dynamic .....	11

# MAP MILWAUKEE GIS SERVICES

OES_GI_planning.....	11
planning.....	12
FEMA_floodplain.....	12
Special_Districts .....	13
Zoning.....	15
property.....	15
foreclosed_properties.....	15
govt_owned .....	16
parcels_mprop .....	17
reference .....	18
land_use_symbols.....	18
orthophoto2005.....	18
reference_map.....	19

# MAP MILWAUKEE GIS SERVICES

## GENERAL INFORMATION ABOUT MAP MILWAUKEE GIS SERVICES

This document provides general descriptions of Map Milwaukee GIS services provided by the City of Milwaukee. Keep current with information about all GIS resources at the Map Milwaukee Portal:

<http://city.milwaukee.gov/mapmilwaukee>. Detailed information about services and layers can be found at their REST endpoint using a web browser.

Map Milwaukee GIS services REST Endpoint: <http://maps.milwaukee.gov/ArcGIS/rest/services>

All map services are projected using State Plane South NAD 27 (Spatial Reference 32054)

Map Milwaukee GIS services provided by the City of Milwaukee are developed using Esri ArcGIS Server 10.0. For more information, visit [Esri's ArcGIS web site](#).

The City of Milwaukee reserves the right to modify or remove GIS services from our web servers. As our experience and needs evolve, so will our GIS services. Notifications of new services and changes to existing services will be published in the Map Milwaukee Newsletter found in the [Map Milwaukee Portal](#), or via [E-Notify](#).

[Link to the City of Milwaukee's Disclaimer of Liability](#)

# MAP MILWAUKEE GIS SERVICES

## ROOT SERVICES

### FIND\_ADDRESS – SCHEDULED FOR REMOVAL

**Scheduled for removal: June 6, 2014. Replaced by geocode/MAIthenDIME\_geocode.**

Geocoding service for City of Milwaukee addresses. If an exact match can be found in the City of Milwaukee Master Address Index (MAI), this service will first assign an address to the centroid of the appropriate parcel. If the address is not found in MAI, it will then estimate a location along the appropriate street segment.

#### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/find\\_address/GeocodeServer](http://maps.milwaukee.gov/ArcGIS/rest/services/find_address/GeocodeServer)

### FIND\_TAXKEY – SCHEDULED FOR REMOVAL

**Scheduled for removal: June 6, 2014. Replaced by geocode/TAXKEY\_geocode.**

Geocoding service for City of Milwaukee taxkeys. If a match is found, the taxkey will be located at the centroid of the appropriate parcel.

#### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/find\\_taxkey/GeocodeServer](http://maps.milwaukee.gov/ArcGIS/rest/services/find_taxkey/GeocodeServer)

### LAGAN\_ADDRESS

This is a map service used by the City of Milwaukee's call center software for address validation.

### LAGAN\_CORPDB

Map service displaying calls for services made to the City of Milwaukee's call center. This service is consumed by the call center software.

## OVERVIEW

Simplified reference map used as the "overview" map in Map Milwaukee applications.

#### REST ENDPOINT

<http://maps.milwaukee.gov/ArcGIS/rest/services/overview/MapServer>

#### LAYERS

- City limits
- Freeways
- Major streets
- Streets
- Waterways

# MAP MILWAUKEE GIS SERVICES

## CENSUS

Map services representing data published by the [U.S. Census Bureau](#) for the City of Milwaukee, Wisconsin.

### ACS\_5YR\_2006-2010

Select datasets from the U.S. Census Bureau American Community Survey data for City of Milwaukee, Wisconsin. 5-year averages: 2006-2010. Data source: [U.S. Census Bureau, American Community Survey](#), 2006-2010 five year averages.

Statistical data represented as choropleth maps. Margins of error included in attribute data.

For more information about the American Community Survey (ACS), how to use ACS data, and how the ACS differs from the decennial census, check out the Census Bureau's ACS page: [Guidance for Data Users](#).

### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/census/ACS\\_5YR\\_2006-2010/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/census/ACS_5YR_2006-2010/MapServer)

### LAYERS

- 2010 census tract labels
- 2010 census tract boundaries
  - 2010 census tracts – overlay
  - 2010 census tracts
- Median household income – 2006-2010 average
  - *Average median household income in the past 12 months (in 2010 inflation-adjusted dollars) for years 2006-2010.*
  - *U.S. Census Bureau, American Community Survey - 2006-2010 5-year estimates, table B19013.*
- Percent below poverty level – 2006-2010 average
  - *Average percent of population, for whom poverty status is determined, that is below poverty level for years 2006-2010.*
  - *U.S. Census Bureau, American Community Survey - 2006-2010 5-year estimates, table S1701.*
- Percent high school graduates – 2006-2010 average
  - *Average percent of population age 25 years and over with a high school diploma or higher for years 2006-2010.*
  - *U.S. Census Bureau, American Community Survey - 2006-2010 5-year estimates, table S1501.*
- Unemployment rate – 2006-2010 average
  - *Average unemployment rate for years 2006-2010 - percent of civilian labor force, age 16 and over, that is unemployed.*
  - *U.S. Census Bureau, American Community Survey - 2006-2010 5-year estimates, table S2301.*

# MAP MILWAUKEE GIS SERVICES

## CENSUS2010

Map service containing 2010 census tracts and SF1 data – data source: [U.S. Census Bureau](http://www.census.gov).

Frequently requested choropleth maps.

Attribute data includes SF1 data beyond that represented in the map layers.

### REST ENDPOINT

<http://maps.milwaukee.gov/ArcGIS/rest/services/census/Census2010/MapServer>

### LAYERS

- 2010 census tract labels
- 2010 census tract boundaries
  - 2010 census tracts – overlay
  - 2010 census tracts
- Population per square mile
- Percent of population that is minority
- Percent of population that is Hispanic
- Median age
- Housing units per square mile
- Average household size
- Percent of housing units that are vacant

# MAP MILWAUKEE GIS SERVICES

## DPW

GIS services representing information maintained by the City of Milwaukee [Department of Public Works](#).

### DPW\_OPERATIONS

Map layers supporting work of City of Milwaukee, Department of Public Works - Operations.

Data updated weekly.

#### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/DPW/DPW\\_operations/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/DPW/DPW_operations/MapServer)

#### LAYERS

- Non-assessable sidewalks
  - *Polygons representing sidewalks in the City of Milwaukee where DPW Operations is responsible for maintenance (snow removal, etc.)*
- City maintained lots
  - *Vacant, in rem, city-owned, and city-maintained parcels for which DPW Operations is responsible for maintenance.*

### PAVING\_PROGRAM

City of Milwaukee dime segments associated with DPW's street paving program.

Map service represents the current program year and the next three program years.

Data updated weekly.

#### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/DPW/paving\\_program/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/DPW/paving_program/MapServer)

#### LAYERS

- Paving projects – 2014
- Paving projects – 2015
- Paving projects – 2016
- Paving project s – 2017

# MAP MILWAUKEE GIS SERVICES

## ELECTION

GIS services representing maps used to conduct elections and define government representative boundaries within the City of Milwaukee, Wisconsin. More information about elections within the City of Milwaukee can be provided by the [Milwaukee Election Commission](#).

## ALDERMAN

Map service containing City of Milwaukee aldermanic districts.

This map service provided multiple layers to provide the user cartographic options for displaying and labeling districts.

## REST ENDPOINT

<http://maps.milwaukee.gov/ArcGIS/rest/services/election/alderman/MapServer>

## LAYERS

- Aldermanic district labels
  - Districts and names
    - Aldermanic districts with names – long
    - Aldermanic districts with names – short
  - District numbers
    - Aldermanic district labels 25,000
    - Aldermanic district labels 150,000
- Aldermanic district outlines
  - Aldermanic district outlines
  - Aldermanic district outlines w/ district number labels
- Aldermanic districts
  - Aldermanic districts
  - Aldermanic districts w/ district number labels



# MAP MILWAUKEE GIS SERVICES

## GEOCODE

Geocoding services created to support location identification for addresses and taxkeys.

### DIME\_GEOCODE

Geocoding service based on DIME - Milwaukee's street centerline dataset. Matches offset 20 feet from street centerline.

#### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/geocode/DIME\\_geocode/GeocodeServer](http://maps.milwaukee.gov/ArcGIS/rest/services/geocode/DIME_geocode/GeocodeServer)

### MAI\_GEOCODE

Geocoding service based on MAI - Milwaukee's Master Address Index. This geocoder should find all valid City of Milwaukee addresses that are also associated with a valid taxkey. Matches will be placed at the associated parcel centroid. If a parcel has more than one address, all matching addresses will be placed at the same centroid point.

#### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/geocode/MAI\\_geocode/GeocodeServer](http://maps.milwaukee.gov/ArcGIS/rest/services/geocode/MAI_geocode/GeocodeServer)

### MAITHENDIME\_GEOCODE

Geocoding service for City of Milwaukee addresses.

Composite geocode service that first references MAI (Milwaukee's Master Address Index) and then DIME (Milwaukee's street centerline dataset). If an exact address match is found in MAI, the point will be placed at the centroid of the associated parcel. If no MAI match is found, the service will revert to interpolating along DIME segments (20 foot offset)

#### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/geocode/MAIthenDIME\\_geocode/GeocodeServer](http://maps.milwaukee.gov/ArcGIS/rest/services/geocode/MAIthenDIME_geocode/GeocodeServer)

### TAXKEY\_GEOCODE

Geocoding service for City of Milwaukee taxkeys. Matches will be placed at the associated parcel centroid.

#### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/geocode/TAXKEY\\_geocode/GeocodeServer](http://maps.milwaukee.gov/ArcGIS/rest/services/geocode/TAXKEY_geocode/GeocodeServer)

# MAP MILWAUKEE GIS SERVICES

## MPD

Map services containing information managed by the [Milwaukee Police Department](#).

### MPD\_GEOGRAPHY

Administrative geography used by the Milwaukee Police Department (MPD).

REST Endpoint

[http://maps.milwaukee.gov/ArcGIS/rest/services/MPD/MPD\\_Geography/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/MPD/MPD_Geography/MapServer)

Layers

- Milwaukee Police Department reporting districts
  - Milwaukee Police Department reporting districts
- Milwaukee Police Department squad areas
  - Milwaukee Police Department squad areas
- Milwaukee Police Department districts
  - Milwaukee Police Department districts (outline)
  - Milwaukee Police Department districts

## OES

Map services developed in support of the City of Milwaukee [Office of Environment Sustainability](#).

### MMSD\_GEOGRAPHY

Developed for City of Milwaukee Office of Environmental Sustainability.

Data provided by [MMSD](#).

Reference geography used in [MMSD's Regional Green Infrastructure Plan](#).

### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/OES/MMSD\\_geography/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/OES/MMSD_geography/MapServer)

### LAYERS

- Watersheds
- Sub-Basins
- Combined sewer area

# MAP MILWAUKEE GIS SERVICES

## MMSD\_GI\_PLAN\_DYNAMIC

Developed for City of Milwaukee Office of Environmental Sustainability.

Data provided by [MMSD](#).

Map analysis used in [MMSD's Regional Green Infrastructure Plan](#).

Identified as “dynamic” in preparation for potential cached instance of this service.

### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/OES/MMSD\\_GI\\_plan\\_dynamic/MapServer/7](http://maps.milwaukee.gov/ArcGIS/rest/services/OES/MMSD_GI_plan_dynamic/MapServer/7)

### LAYERS

- Total impervious area
  - Impervious – airport
  - Impervious – parking
  - Impervious – paved road
  - Impervious – structure
- Constraints
  - Set backs < 15 feet
  - High density area
  - Areas having slope > 12%
  - Depth to groundwater < 6 feet
  - Depth to bedrock < 6 feet

## OES\_GI\_PLANNING

Maps used by City of Milwaukee [Office of Environmental Sustainability](#) for green infrastructure planning.

### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/OES/OES\\_GI\\_planning/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/OES/OES_GI_planning/MapServer)

### LAYERS

- Basement backups by year
  - 2008 basement backup locations (1,785)
  - 2009 basement backup locations (658)
  - 2010 basement backup locations (11,600)
- DPW basement connection areas

# MAP MILWAUKEE GIS SERVICES

## PLANNING

Services included in the planning folder represent information managed by various organizations and city departments. The information used in the planning services is used across departmental organization and is therefore group by the general “planning” function.

### FEMA\_FLOODPLAIN

Location and attributes for flood insurance risk zones on the DFIRM.

<http://www.fema.gov/national-flood-insurance-program/map-service-center>

### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/planning/FEMA\\_floodplain/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/planning/FEMA_floodplain/MapServer)

### LAYERS

- FEMA Floodway
- FEMA Special Flood Hazard Areas – High Risk

# MAP MILWAUKEE GIS SERVICES

## SPECIAL\_DISTRICTS

A "catch-all" service with layers representing a number of different districts/areas used for various forms of planning and administration by the City of Milwaukee. These districts are often used by various City of Milwaukee departments, but are organized into group layers in this service based on the department or departmental unit that is responsible for defining the boundaries.

### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/planning/Special\\_Districts/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/planning/Special_Districts/MapServer)

### LAYERS

- [Department of City Development \(DCD\)](#)
  - Architectural Review Board boundaries (ARB)
    - *ARBs work as partner organizations with DCD Planning Administration.*
    - <http://city.milwaukee.gov/PlanningPermits>
  - Area Plans
    - *Area Plans are part of the City of Milwaukee's Comprehensive Plan. The City prepares plans and studies which guide development in individual neighborhoods; these documents include neighborhood redevelopment and action plans.*
    - <http://city.milwaukee.gov/Plansandstudies/AreaPlans.htm>
  - Business Improvement Districts (BID)
    - <http://city.milwaukee.gov/bids>
  - Neighborhoods
    - *Neighborhood boundaries are defined by [Milwaukee Department of City Development](#).*
    - *These boundaries were defined to create mutually exclusive neighborhood districts for the entire city. They do not necessarily represent neighborhood association boundaries.*
  - Neighborhoods (outlines)
    - *This layer represents the same boundaries as the layer, "neighborhoods", but provides an alternative cartographic representation.*
  - Neighborhood Improvement Districts (NID)
    - <http://city.milwaukee.gov/DCD>
  - Redevelopment plans
    - *A Redevelopment Plan is a guiding document, approved by the Redevelopment Authority of the City of Milwaukee (RACM) and the Common Council, in accordance with the State of Wisconsin's blighted area law. This document creates a boundary, goals and requirements for the specific geographic area. These goals and requirements may include numerous issues such as blight designation, property acquisition, land use planning and design requirements.*
    - <http://city.milwaukee.gov/PlanningPermits/PlansStudies.htm>
  - Tax Incremental Districts (TID)
    - *These districts are sometimes referred to as tax incremental financing districts.*
    - <http://city.milwaukee.gov/TIDs>
- [Neighborhood Improvement Development Corporation \(NIDC\)](#)
  - Targeted Investment Neighborhoods (TIN)
    - <http://city.milwaukee.gov/TINs>

# MAP MILWAUKEE GIS SERVICES

- [Historic Preservation](#)
  - Local historic sites
    - *Local historic sites administered by the Milwaukee Historic Preservation Commission*
    - <http://city.milwaukee.gov/hpc/LocalDesignations>
  - National historic sites
    - *National historic sites defined by the National Register of historic Places.*
    - <http://www.cr.nps.gov/nr/>
  - Local historic districts
    - *Local historic districts administered by the Milwaukee Historic Preservation Commission*
    - <http://city.milwaukee.gov/hpc/LocalDesignations>
  - National historic districts
    - *National historic districts defined by the National Register of historic Places.*
    - <http://www.cr.nps.gov/nr/>
  - Historic designation parcel classification
    - *City of Milwaukee parcels that have local and/or national historic (NRHP) designation status. Parcels have been classified based on category of historic status:*
      - 1 - Both NRHP and local designation.
      - 2 - NRHP only.
      - 3 - Local designation and eligible for NRHP.
      - 4 - Eligible for NRHP, but no local designation.
      - 5 - Local designation, but no NRHP recognition.
- [Community Development Grants Administration](#)
  - Neighborhood Revitalization Strategy Areas (NRSA)
  - Neighborhood Strategic Planning area (NSP)

# MAP MILWAUKEE GIS SERVICES

## ZONING

Map service with a comprehensive collection of maps used for zoning-related activities and decision-making by the City of Milwaukee Department of City Development.

### REST ENDPOINT

<http://maps.milwaukee.gov/ArcGIS/rest/services/planning/Zoning/MapServer>

### LAYERS

- Zoning overlays
  - Development Incentive Zones (DIZ)
  - Interim Study overlay zones (IS)
  - Lakefront overlay zone
  - Neighborhood Conservation overlay zones (NC)
  - Site Plan Review overlay zones (SPROZ)
  - Shoreland/wetland overlay zones
- Planned development
  - Detailed planned development (DPD)
  - General planned development (GPD)
- Zoning
  - Zoning

## PROPERTY

The property folder contains GIS services that represent property boundaries and attribute information found in the City of Milwaukee Master Property File ([MPROP](#)).

## FORECLOSED\_PROPERTIES

Properties identified as foreclosed using the following [MPROP](#) query:  
(CONVEY\_TYPE = 'SD' AND CONVEY\_FEE = 0 AND CONVEY\_DATE >= date '2006-01-01') OR (CONVEY\_TYPE = 'IR' AND NR\_UNITS > 0 AND CONVEY\_DATE >= date '2007-01-01')

Query developed by City of Milwaukee [Department of City Development](#).

Updated weekly.

### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/property/foreclosed\\_properties/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/property/foreclosed_properties/MapServer)

### LAYERS

- Foreclosed properties – city owned
- Foreclosed properties – bank owned

# MAP MILWAUKEE GIS SERVICES

## GOVT\_OWNED

"Government Ownership" is identified by a property's tax exempt status and subsequent exempt class, as it is stored in [MPROP](#). Tax exemption information is tied to the assessment year, so all tax exemption data represents the previous calendar year. As a result, if a property undergoes a change in exempt status and/or exempt type this calendar year, that change will not be reflected in MPROP or this map service until next year.

This service does not represent of comprehensive inventory of City of Milwaukee Real Estate holdings.

Tax exempt status and classification data are maintained by the City of Milwaukee [Assessor's Office](#).

Map service is updated weekly.

## REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/property/govt\\_owned/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/property/govt_owned/MapServer)

## LAYERS

- Government properties (tax exempt type)
  - Municipal properties
  - County properties
  - State properties
  - Federal properties



# MAP MILWAUKEE GIS SERVICES

## PARCELS\_MPROP

Resource map service containing the City of Milwaukee parcel map with MPROP attribute data. Also includes frequently used layers that are selections and/or classifications of parcels based on MPROP values. MPROP documentation: <http://city.milwaukee.gov/DownloadTabularData3496.htm>

### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/property/parcels\\_mprop/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/property/parcels_mprop/MapServer)

### LAYERS

- Parcels – no MPROP
- Parcels – MPROP\_lite
- Parcels – MPROP\_full
- Assessment information
  - Assessment class
  - Residential assessed value
- Occupancy status
  - Residential owner occupied parcels
  - Residential non-owner occupied parcels
- Tax status
  - Tax delinquent parcels by years delinquent
  - Tax delinquent parcels
  - Tax exempt parcels by exempt class
  - Tax exempt parcels
- Foreclosed properties
  - Foreclosed properties – city owned
  - Foreclosed properties – bank owned
- Land use selections
  - Parks and parkways
  - Vacant lots

# MAP MILWAUKEE GIS SERVICES

## REFERENCE

General resource GIS services.

## LAND\_USE\_SYMBOLS

Map service containing City of Milwaukee land use symbols separated into 4 layers:

### REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/reference/land\\_use\\_symbols/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/reference/land_use_symbols/MapServer)

### LAYERS

- Land use symbols
  - Building footprints
  - Single family and duplex symbols
  - Land use symbols and text
  - Parking lots

## ORTHOPHOTO2005

Map service containing 2005 aerial imagery.

This map service is designed to replace the “base\_aerial” service.

### REST ENDPOINT

<http://maps.milwaukee.gov/ArcGIS/rest/services/reference/orthophoto2005/MapServer>

### LAYERS

- 2005 orthophoto

# MAP MILWAUKEE GIS SERVICES

## REFERENCE\_MAP

Reference map for the city of Milwaukee. Includes parcels, waterways, roadways, and city limits.

This map service is designed to replace the “base\_map” service.

## REST ENDPOINT

[http://maps.milwaukee.gov/ArcGIS/rest/services/reference/reference\\_map/MapServer](http://maps.milwaukee.gov/ArcGIS/rest/services/reference/reference_map/MapServer)

## LAYERS

- House numbers
  - *Available starting at 1:2,500*
- Taxkey labels
  - *Taxkey label visibility is based on map scale and size of parcel. Largest parcels start labeling at 1:7,000.*
- City limits
  - City limits
    - *symbolized with solid line*
  - City limits – dashed
    - *Symbolized with dashed line*
- Freeways
  - *Includes a number of scale-dependent layers withy symbolization designed for the designated scale.*
- Major streets
  - *Includes a number of scale-dependent layers withy symbolization designed for the designated scale.*
- Streets
  - *Includes a number of scale-dependent layers withy symbolization designed for the designated scale.*
- Waterways
- Parcels
  - Parcels – outline
    - *Parcel polygons symbolized with only an outline.*
  - Parcels
    - *Parcel polygons symbolized with fill and outline colors.*